ABSTRACTION

Umi Kholifah, 2016, NIT : 49124643 T. *"influence of turbocharger handling based on main engine good combustion by fault tree analysis method in MV. Kartini Baruna"*. Engine department essay, for diplom IV , politeknik ilmu pelayaran semarang. 1st Lecture : Drs. Darjono, M.Mar E . 2nd lecture : Tony Santiko, S.ST., M.Si.

Main Engine is kind of machinery which uses fuel oil as main power by combustion. This power has been taken by mixture Fuel oil and air inside of combustion chamber. One compartment which is useful for burning element inside is good air circulation. Good air circulation which is supplied to main engine caused by turbocharger. In practically by using turbocharger, combustion process would get maximum point. combustion perfectly in good condition when comparation between enough fresh air and fuel oil. Turbocharger has function as air flowing control, by using turbocharger amount of fresh air entered extend than engine working without additional turbocharger .

Conclution from influence of turbocharger handling based on Main Engine good combustion in MV. Kartini Baruna based on less of lubricating on maintenance system, as common in blower side, chocked in impeller nozzle ring. To produce good air circulation is depend on intercooler compartment, leakage and dirtyness filter. Leakage from exhaust gas system makes decreasing pressure for turbocharging rotation. As suggestion that we can do are maintenance for lubricating oil, blow down for air circulation to eschew from surging. To produce high air quality we should clean intercooler, cleaning in systematic and repair exhaust gas compartment and avoid from leakage. Also doing maintenance as regular for those three system injection, compression, and air circulating which caused exhaust gas leakage and maintenance held based on instruction manual book.

Fault tree analysis is kind of method that used by writer. Fault tree analysis method as mainstay method specially for safety device in general case to difficult system. This method use some of logical gates to connect between one component to another one.

Key word : turbocharger, fault tree analysis, top event and basic event.